



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,652	01/27/2004	Younger Ahluwalia	03398.000004.	3967
5514 7590 08/06/2009 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
EXAMINER				
RUDDOCK, ULA CORINNA				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
08/06/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/766,652  
Filing Date: January 27, 2004  
Appellant(s): AHLUWALIA ET AL.

---

Alicia A. Russo  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 11, 2009, appealing from the Office action mailed November 12, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

10/766649 and 10/354220.(3) **Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,600,634	LANGER	7-1986
GB 2,167,060	WEAVER et al.	5-1986
4,994,317	DUGAN	2-1991
6,228,497	DOMBECK	5-2001

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Langer (US 4,600,634) and GB 2167060 (GB '060) or Dugan (US 4,994,317) or Dombeck (US 6,228,497). Ahluwalia (US 5,965,257) disclose a structural article used in a wide variety of products including fire walls, vapor barriers, roofing underlayment, and facing sheets (col 3, ln 34-42). The articles comprise a substrate having an ionic charge which is coated with a coating having essentially the same ionic charge. The coating consists of a filler material and a binder material. The substrate is preferably fiberglass and the filler is selected from fly ash, charged calcium carbonate, and ceramic microspheres. The binder is preferably acrylic latex (abstract). Ahluwalia further discloses that it is well known to include clay as a filler material in structural articles in the building industry (col 1, ln 12-26). The articles are planar in shape and the substrate is coated on one side or both sides depending on the intended application (col 3, ln 42-44). The structural material may be coated on one or both sides with a water repellent material, an algicide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and a coloring dye (col 3, ln 54-67 to col 4, ln 1-3). The structural article contains 10-25% by weight glass fibers (claim 13) and the coating comprises nearly 85% by weight

of the article (col 3, ln 17-18). Ahluwalia discloses the claimed invention except for the teaching that a metallic component is adhered to the coated substrate on one or both sides of the substrate and that the metallic component is from 5-10% by weight of said composite material and the specific teaching that clay is added to the coating.

Langer (US 4,600,634) discloses flexible fibrous endothermic sheet materials for fire protection. The flexible sheet is made of fiberglass and acrylic binder and is useful in building construction (abstract). Fillers useful in the composition include alumina trihydrate (col 3, ln 59). A backing, comprising an aluminum foil, is added to the backing of the sheet material to give an added degree of strength to the sheet material (col 4, ln 8-10). It would have been obvious to one having ordinary skill in the art to have added Langer's aluminum sheet to one or both sides of the coated substrate of Ahluwalia, motivated by the desire to create a structural article with increased strength and durability.

Furthermore, it should be noted that optimizing the amount of metallic component in the article is a result effective variables. The amount of metallic component directly affects the strength of the article. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a material comprising 5-10% of a metallic component, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the amount of metallic component motivated by the desire to obtain an article with increased strength, durability, and flame resistance.

GB 2167060 discloses a fire resistant material comprising glass wool fibers and one or more selected clays (abstract). The clays are selected to provide an endothermic reaction in the fire resistant material (page 2, ln 5-11). Dugan et al. (US 4,994,317) disclose a fabric suitable for use as a flame barrier fabric comprising a flame durable textile fabric (abstract). The fabric comprises inorganic yarns such as glass (col 2, ln 37). To provide enhanced resistance to flame and heat, hydrated clay may be incorporated in a silicone layer (col 3, in 58-61). Dombeck (US 6,228,497) disclose a high temperature resistant glass fiber composition comprising glass fibers and a latex binder (abstract). Clay fillers are frequently added to inorganic fiber products to improve their fire resistance (col 1, ln 19-21 and col 5, ln 4-7). It would have been obvious to one having ordinary skill in the art to have added the clay filler taught by GB 2167060 or Dugan et al. or Dombeck to the substrate of Ahluwalia and Langer, motivated by the desire to create a substrate that has increased flame resistance.

#### **(10) Response to Argument**

Appellant respectfully submits that the Office has failed to provide any rationale that can reasonably be construed as establishing a *prima facie* case of obviousness against Claim 1 and in particular the feature of "a coating which coats the substrate having essentially the same ionic charge, wherein said coating does not bleed through said substrate," as recited by Claim 1. This argument is not persuasive because Ahluwalia (US 5,965,257), in column 1, ln 22, specifically states that clay has been added to prior art materials for use in building materials. However, it should be noted that Ahluwalia disclose a substrate having an ionic charge which is coated with a

coating having essentially the same ionic charge (abstract). Finally, it should be noted that the Examiner is not relying on the Ahluwalia reference for its use of a clay filler. The GB '060, Dugan et al., and Dombeck references were cited for their inclusion of clay filler in their fire resistant compositions. Appellant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references. *In re Keller*, 208 USPQ 871 (CCPA 1971). References are evaluated by what they suggest to one versed in the art. The test for obviousness is not whether the features of the reference may be bodily incorporated into the other to produce the claimed subject matter, but simply what the references make obvious to one having ordinary skill in the pertinent art. *In re Bozek*, 163 USPQ 545 (CCPA 1969). The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). In this case, the Ahluwalia reference discloses the claimed invention except for the teaching that a metallic component is adhered to the coated substrate on one or both sides of the substrate and that the metallic component is from 5-10% by weight of said composite material and the specific teaching that clay is added to the coating. Langer discloses an aluminum foil backing that is added to the backing of the sheet material to give an added degree of strength to the sheet material. GB '060, Dugan, and Dombeck all disclose clay as a preferred filler material because it provides increased fire resistance. Therefore, the combination of disclosures taken as a whole properly rejects the presently claimed invention.

Appellant also argues that the claims are not obvious in view of the cited references because Appellant has attempted to show unexpected results by providing results of the cotton ball test discussed in paragraphs 49 and 50 of the present specification which "clearly demonstrates that the results of the claimed combination are unexpected." However, the results of the cotton ball test refer only to the system described in the above referenced application and not to the individual claims of the application. As such the declaration does not show that the objective evidence of nonobviousness is commensurate in scope with the claims. The claims do not set forth any specific properties resulting from the cotton ball test. See MPEP § 716. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness. Furthermore, while Appellant may argue that the combination of Ahluwalia, Langer, GB '060, Dugan, and Dombeck would not result in a material as set forth in claim 1, there is nothing on the record to support this allegation. As shown above, Ahluwalia reference discloses the claimed invention except for the teaching that a metallic component is adhered to the coated substrate on one or both sides of the substrate and that the metallic component is from 5-10% by weight of said composite material and the specific teaching that clay is added to the coating. Langer discloses an aluminum foil backing that is added to the backing of the sheet material to give an added degree of strength to the sheet material. GB '060, Dugan, and Dombeck all disclose clay as a preferred filler material because it provides increased fire resistance. As a result, the combination of disclosures taken as a whole properly rejects the presently claimed invention.



**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer. In their Appeal Brief, Appellant has incorrectly labeled 10/354220. As of yet, no Board Decision has been set forth in 10/354220. This application was remanded back to the Examiner and is currently going through prosecution.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ula C Ruddock/

Primary Examiner, Art Unit 1794

Conferees:

/D. Lawrence Tarazano/

Supervisory Patent Examiner, Art Unit 1794

/Christopher A. Fiorilla/

Chris Fiorilla

Supervisory Patent Examiner, Art Unit 1700